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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,716	08/07/2003	Hiraku Murayama	011350-317	1956

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EXAMINER

APANIUS, MICHAEL

ART UNIT	PAPER NUMBER
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3736

NOTIFICATION DATE	DELIVERY MODE
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01/18/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/635,716

Applicant(s)

MURAYAMA ET AL.

Examiner

Michael Apanius

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 28 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27, 29, 30 and 32-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/8/2007.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. The amendments to claims 1, 12 and 23 and the amendments to the specification are acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 10-16, 21-27, 29, 30 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Skujins et al. (US 6,918,882). Skujins discloses a guide wire comprising: a first wire (16), a second wire (14) made from a material having a larger elastic modulus than the first wire (column 2, lines 35-52); wherein the wires are joined together by welding (column 5, lines 50-67) without axial overlap (see figure 4); and the second wire has, in the vicinity of a welded portion between said first wire and said second wire, a small cross sectional area portion (24) having a cross-sectional area smaller than a cross-sectional area of a proximal end portion (see just right of 18 in figure 4) of said first wire. A cover layer (18) is disposed over the welded portion. The small cross-sectional area portion has a smaller outer diameter than the proximal end

portion of said first wire. The small cross-sectional area portion has a cross-sectional area/outer-diameter that is gradually reduced (see reduction between 14 and 24 in figure 4) in the direction towards the distal end of the guide wire. A flexural rigidity of the distal end of said second wire is *nearly* equal to that of the proximal end of the first wire (at 16). A step filling member (18) is formed in the outer periphery of said welded portion. The second wire has a higher rigidity than the first wire. The guidewire of figure 4 is a view post grinding (column 1, lines 40-41). Before grinding, the welded portion has a projection (see 18 in figure 1) projecting in the outer peripheral direction (18 in figure 1 has a larger diameter than the wires such that 18 projects in the outer peripheral direction). Skujins further similarly discloses the steps of making the guide wire. Skujins further discloses grinding the distal end portion of the second wire after welding (column 6, lines 1-7).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-9, 17-20, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skujins et al. (US 6,918,882) in view of Uchino et al. (US 6,001,068).

6. Skujins discloses a first portion (transition between 14 and 24) having an outer diameter gradually reduced in the direction toward the distal end of said guide wire.

Skujins further discloses a third portion (24) having a nearly constant outer diameter.

However, Skujins does not expressly disclose a second portion having an outer diameter gradually increased in the direction toward distal end of the guide wire.

7. Uchino discloses a first portion (see around 62 in figure 11) gradually reduced in the direction toward the distal end of said guidewire. Uchino teaches spot welding a connector to a wire (column 14, lines 52-61). As shown in figure 11, the spot weld creates a second portion of the wire having an outer diameter gradually increased in the direction toward the distal end of the wire (see figure 11). Uchino also teaches a third portion having nearly constant outer diameter between the other portions. The first portion has a length in a range of 0.1 to 1000 times a length of said second portion (see dimensions in figure 6B)

8. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to have spot welded the connector of Skujins as taught by Uchino to obtain the first, second and third portions as set forth in claims 6-9, 17-20, 33 and 34 in order to achieve the predictable result of adhering a connector to two wires.

Response to Arguments

9. Applicant's arguments and claim amendments filed 11/6/2007 have been fully considered but they are insufficient to overcome a rejection based on the embodiment shown in figure 4 of Skujins. The embodiment of figure 4 shows two wires welded together without axial overlap as required by the amended claims.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Apanius whose telephone number is (571) 272-5537. The examiner can normally be reached on Mon-Fri 8am-4:30pm.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MA

A handwritten signature in black ink, appearing to read "M. H. Kirby", is located in the lower right quadrant of the page. The signature is fluid and cursive, with a large, stylized initial "M".